

Survey on Novel Approach for Crop Yield Prediction using Machine Learning

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Abstract: Predicting crop yields is crucial to agriculture. Crop production is affected by a number of factors. The goal of this study is to provide low-cost techniques for forecasting agricultural yields utilising existing variables like irrigation, fertiliser, and temperature. The five Feature Selection (FS) algorithms described in this article are sequential forward FS, sequential backward elimination FS, correlation-based FS, random forest variable significance, and the variance inflation factor algorithm. Machine learning techniques are typically well adapted to a particular area, therefore they substantially help farmers forecast agricultural output. With a novel FS method termed modified recursive feature removal, crop prediction can be improved (MRFE). The MRFE approach locates and ranks the most crucial characteristics in a dataset with the use of a ranking algorithm.

Keywords: Feature Selection methods, Machine Learning, Performance Metrics, Crop prediction

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